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HUMAN RESOURCE INNOVATION
MARINE INDUSTRY STANDARDS
WELDING
INDUSTRIAL ENGINEERING
EDUCATION AND TRAINING

# THE NATIONAL SHIPBUILDING RESEARCH PROGRAM

1985 Ship Production Symposium Volume I Paper No. 21:
Overview of NSRP

U.S. DEPARTMENT OF THE NAVY
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### OVERVIEW OF THE NSRP

# Jesse Brasher Ingalls Shipbuilding

## Chairman, Ship Production Committee

Good morning and welcome to the 1985 Ship Production Symposium. This symposium, which is an annual event, is a vital part of the overall National Shipbuilding Research Program. Our theme this year is 'Moving Ahead With The Implementation of Advanced Technology".

There are many individuals responsible for-the success of this symposium - not all of them present here - and only two will be noted. Now, Howard thinks I am going to call his name but he will remain a nameless Texan and the two I will honor are Wendy Barhydt and Mary Casto.

We have an impressive program this week; and this morning we have three exceptional keynote speakers. It would be an error not to mention the symposium attendees. If you will look to your left or to your right, chances are good that you will see someone that is "somebody". Historically the attendees at these symposia represent the overwhelming majority of shipbuilders in this country and some oversees. The individual attendees would easily fit into anyone's compilation of a "Who's Who in the American Marine Industry".

The National Shipbuilding Research Program has experienced a steady growth. Over the years, as needs have been identified and articulated, programs have been implemented to address these needs. The contribution of the SPC to the present program has a solid foundation, thanks again to the leadership of people like Ellsworth Peterson, Ed Petersen, Jack Garvey, Bob Schaffran, Pete Palermo, Jack McInnis, the Panel Chairmen and the Program Managers.

The theme of this year's symposium, "Moving Ahead With The Implementation of Advanced Technology", warrents a comment you will appreciate as the week progresses. Advanced technology in this program has a broad interpretation. It includes hardware, software, management, training, quality, as well as a host of other topics which contribute to, or control the cost of, shipbuilding. This symposium and this interpretation are consistant with industry cost drivers which must be addressed.

Being sensitive to and addressing the needs of the shipbuilding industry is what this program is all about. That is precisely why the number of Panels have been added to the Committee such that ten exist, an eleventh is in the approval cycle and a twelfth is under consideration. New panels are from time to time created to address new needs, new and perhaps specialized technology, such as flexible automation. That is not the end of the story, however. Our newest panel, Human Resources, arose from the ashes of an earlier panel that had been phased out. Other, older panels address current

technology in their respective fields. New technology is a way of life and must be addressed even in such "old" subjects as welding. There' is no area of shipbuilding that is considered beyond improving.

New things just don't happen in shipbuilding; they must be made to happen. Sometimes though, they must be made to.happen over someone's prostrate body. This program has the ingredients to make things happen even in the present shipbuilding environment. Most of you know what I am about to say, but let me briefly reiterate for you:

- First The program is successfully addressing a real need.
- Second The program is truly national, representing all geographic areas and large, medium and small industries.
  - Third The three funding sources the Maritime
    Administration, the U.S. Navy and the marine
    industry all have a financial interest in making
    the program work and are willing partners in the
    endeavor, and
  - Finally We have talent, experience and leadership in abundance.

For those of you who have had an opportunity to see and read the new Journal of Ship Production, Volume 1, Number 1, there is an excellent presentation by Baxter on the many projects undertaken by the SPC and it is impossible to summarize that here. Individual reports on some completed projects will be delivered at this symposium. For fiscal year 1985, about 50 new projects have been selected for research. Still others are in the wings which will be addressed in FY 1986.

The work of the committee panels is a story unto itself and is, of course, our main story. For the benefit of the committee members and the 300 plus panel members, a quote from my recent testimony before the subcommittee on Merchant Marine, U.S. House of Representatives, appears appropriate here: "In my opinion the NSRP is by far the most effective broad based shipbuilding/ship design modernization program in this country today. We speak with pride of this cooperative program, whom the program represents, what the program has accomplished and finally what it is yet to accomplish. This year the 10 panels will conduct research and development on about 50 projects directed to reducing the cost of shipbuilding. We have a fine program, but it can be better. We have some good, perhaps even great, shipyards, but they can be better. It is our objective to continue to make a significant contribution to the betterment of the NSRP and to the shipbuilding process."

There is another story in the NSRP that is less well-known, but is a vital part of the overall program and I will even call it the glue that holds the program together. Bear with me for a few more minutes as I list some of these activities which are either generic to the program or are policy matters, without which the program would be less effective. .

- 1. The intensity of the program has been such that the size of the full SPC limited the number of meetings per year and the attendance. Our leadership saw a need and formed the Executive Control Board. This smaller group meets about 4 times a year and greatly facilitates the work of the full committee and the program.
- 2. Symposia such as you are now attending are an instrument of the committee and, as noted earlier, a vital annual event.
- 3. The ink was hardly dry on the National Research Council report on "Toward More Productive Naval Shipbuilding" when the committee contacted the Navy in reference to the report recommendations. One particular recommendation concerned an industry/Navy task force on CAD/CAM. Since that initial contact, a series of actions has taken place which has included a definition of the need, an initial strawman, and finally this month, a task force recommendation.
- \_4. The Journal of Ship Production recently initiated in SP-9 has been an instant success and meets a need of every panel and, indeed, the program.
- 5. Routinely, your committee is called upon to meet a need by someone, somewhere. This year we have sponsored workshops, formed several task forces and at least one high level industry/Navy interface group.
- 6. You and your efforts are represented at national and international symposia. These include the M-TAG, SAE and ICCAS. This past July, testimony on behalf of the committee was presented before the Biaggi Subcommittee.

  While I am at this point, it is necessary to point out that these tasks are almost exclusively performed by volunteers se volunteers to chair the task force or ad hoc committee, to serve on them and to make the speeches. Now these people have full time jobs back home, but I have to tell you that the response of each of you to these requests and needs has been nothing less than outstanding. This willingness to go the extra 500 miles is characteristic of our members and is responsible for the success of the program.

A word on the future - I am excited by what is before us. The productive cost reduction needs of the country's shippards should ensure full employment for the NSRP. Interest in the NSRP is.at a high level and, to steal a thought, our task should be to work ourselves out of a job. Our challenge is great and our opportunities bountiful. That only means our victory will 'be greater. We can do it.

One final point before closing, in case you are asking what effect the program is having. For the National Shipbuilding Research Program, a recent public document reported an estimated savings of 75 million dollars from a total funding of 6.7 million dollars.

That is not a bad return on your investment and, actually, that is not the end of the story since savings will continue to accrue as a new technology receives continued and wider use.

As I reread this Overview my thought was, "Hey, that's the type program I would like to be associated with". The reason for that is people -- people such as yourselves.

THANK YOU.

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